

REMARKS

Claims 1 through 17 are pending in this application. Claims 1 through 6 are amended in several particulars for purposes of clarity in accordance with current Office policy, to assist the examiner and to expedite compact prosecution of this application. Claims 7 through 17 have been newly added.

I. SPECIFICATION

The specification was amended in several particulars for purposes of making some minor corrections, for clarity in accordance with current Office policy, to assist the Examiner and to expedite compact prosecution of this application. No new matter was added.

II. DRAWING

In order to assist the Examiner and to expedite compact prosecution of this application, a minor grammatical correction was made to figure 5 which is supported by the specification. Therefore, Figure 1 has been updated to include the mail server which is supported by the specification (*e.g.*, paragraph 34). According to 37 CFR 1.121 Manner of making amendments in application:

(d) *Drawings*. Application drawings are amended in the following manner: Any change to the application drawings must be submitted on a separate paper showing the proposed changes in red for approval by the examiner. Upon approval by the examiner,

new drawings in compliance with §1.84 including the changes must be filed.

Therefore, according to 37 CFR §1.121, the change to drawing has been submitted on a separate sheet showing the proposed changes in red for approval by the examiner. Upon approval by the examiner, new drawings in compliance with §1.84 including the changes will be filed.

Accordingly, a letter to the Office Draftsman accompanies this response. Indication in subsequent Office correspondence of the acceptance to the drawing corrections proposed in the letter, is requested to enable applicant to timely arrange for the corrections to be made prior to the date for payment of any issue fee. No new matter was added since the amendment to the drawing is supported by the specification.

III. REJECTION OF CLAIMS (35 U.S.C. § 103)

Claims 1 through 6 are rejected under 35 U.S.C. §103(a) as being unpatentable. The Applicant respectfully traverses.

According to MPEP 706.02(j), the following establishes a *prima facie* case of obviousness under 35 U.S.C. §103:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation,

either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The Examiner stated in point 3 of page 2 of paper number 6 that Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anzai (US 5,223,952). In order to assist the Examiner and to expedite compact prosecution of this application, we assumed that the Examiner made a typographical error and the Examiner meant to also include Yim (US 5,822,651) since "Yim" is later mentioned in the detailed action.

The Examiner stated that with regard to claim 1, Yim discloses a process for controlling a transfer voltage in an image forming apparatus (col 1, lines 14-18), the process comprising the

steps of: detecting the kind of paper selected by a user (col 5, lines 22-41); editing by reducing the number of pixels of the image data at a certain rate if the detected paper is thick (col 5, line 47 - col 7, line 38); and transmitting the edited image data to the LSU and performing the printing work for the edited image data (col 7, lines 38-49).

However, looking at col 5, line 47 - col 7, line 38 and the remaining portions of Yim, there is no teaching or suggestion of *editing by reducing the number of pixels of the image data at a certain rate when the detected paper is thick* as claimed in claim 1. Yim in col 5, line 47 - col 7, line 38 discusses voltages but nothing teaching or suggesting about the number of pixels of the image data at a certain rate. Anzai also fails to teach or suggest such a limitation.

Furthermore, the combination of references fail to teach or suggest *transmitting the edited image data to the laser scanning unit and performing the printing work for the edited image data* as claimed in claim 1. The Examiner states that Yim teaches transmitting the edited image data to the LSU and performing the printing work for the edited image data in col 7, lines 38-49. However, col 7, lines 38-49 state that the amount of toner transferred to the printing papers from the photosensitive drum is increased, thereby obtaining the optimum image quality and the text also states some of the advantages of the Yim patent, but there is no teaching of transmitting the edited image data to a laser scanning unit. Anzai also fails to teach or suggest such a limitation. The Examiner states that Anzai teaches a laser scanning unit as the laser beam 3 forming an electrostatic latent image, however, the Examiner still fails to mention how Anzai or in combination with Yim, how the *edited image data* is transferred to the laser scanning unit. No such teaching or suggestion is made by either Yim, Anzai or their combination.

The Federal Circuit has mentioned that “[t]he test for obviousness is not whether the features of one reference may be bodily incorporated into another reference...Rather, we look to see whether combined teachings render the claimed subject matter obvious.” *In re Wood*, 599 F.2d 1032, 202 USPQ 171, 174 (CCPA 1979) (citing *In re Bozek*, 416 F.2d 1385, 1390, 163 USPQ 545, 549-50 (CCPA 1969); *In re Mapelsden*, 329 F.2d 321, 322, 141 USPQ 30, 32 (CCPA 1964).

Here, simply combining a concept of transmission of some sort of data and the disclosure of a laser scanning unit does not then teach or suggest transmitting the edited image to the laser scanning unit.

Furthermore, no such *edited image* as claimed in the present invention is taught or suggested by the combination of references.

Yim mentions about increasing the amount of toner transferred to the printing papers by the increase of the voltage, but this still does not teach or suggest the transfer of the *edited image data* and that the edited image data has a reduced number of pixels. Increasing the amount of toner transferred does not make such a teaching or suggestion.

With regard to claim 2, the Examiner states that Yim also discloses wherein the editing step is performed using Econo mode in which the pixels of the light scanned are equally split into an integer number of pixels in order to represent one pixel of the image data, and only a certain number of pixels among the equally split pixels of the light are scanned (col 5, line 47 - col 7, line 38) and concerning claim 3, the Examiner states that Yim also discloses wherein the editing

step is performed using Ret mode in which the print area is split into a plurality of small areas, and some pixels among the total pixels for each resolution included in the respective small areas are removed (col 5, line 47 - col 7, line 38).

By citing col 5, line 47 - col 7, line 38, the Examiner is citing half of the detailed disclosure of Yim. Respectfully, the Examiner must provide the completeness in the rejection under 37 C.F.R. §1.104(b) and (c) in formulating the rejection. As mentioned in 37CFR §1.104 (c)(2), "When a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable." Under 37CFR §1.104 (c)(2), greater specificity than simply citing half of the detailed disclosure is mandated. The Applicant would greatly appreciate the Examiner's help in this matter because it makes it difficult for the Applicant to respond to the Examiner's concerns and furthermore, the Examiner then fails in his burden of proving a *prima facie* case.

In all of that disclosure of Yim cited by the Examiner, transfer voltages are mentioned in which the printing environment and the thickness of the printing papers are compensated. However, there is no teaching or suggestion of where *the editing step is performed using Econo mode in which the pixels of the light scanned are equally split into an integer number of pixels in order to represent one pixel of the image data, and only a certain number of pixels among the equally split pixels of the light are scanned* as claimed in claim 2 and there is not teaching or suggestion of *the editing step is performed using Ret mode in which the print area is split into*

a plurality of small areas, and some pixels among the total pixels for each resolution included in the respective small areas are removed as claimed in claim 3. Nothing with any relevance is mentioned concerning the editing of the stored image's pixels. As mentioned above in MPEP 706.02(j), "Finally, the prior art reference (or references when combined) must teach or suggest *all the claim limitations*" and clearly here not all of the claimed limitations are taught or suggested by Yim as mentioned by the Examiner or by the combination of Yim with Anzai.

With regard to claim 4, the Examiner states that Yim discloses a process for controlling a transfer voltage in an image forming apparatus (col 1, lines 14-18), the process comprising the steps of: detecting the kind of paper selected by a user (col 5, lines 22-41); decreasing the amount of the light emitted from the LSU at a predetermined rate and performing the printing work (col 5, line 47 - col 7, line 38); and transmitting the edited image data to the LSU and performing the printing work for the edited image data (col 7, lines 38-49). However, then the Examiner also states that Yim fails to teach or suggest an LSU but that Anzai does teach an LSU by the laser beam 3.

However, the claimed present invention of claim 4 is claiming *transmitting the image data to the laser scanning unit if the detected paper is a thick; and decreasing the amount of the light emitted from the laser scanning unit at a predetermined rate and performing the printing work* and not decreasing the amount of the light emitted from the LSU at a predetermined rate and performing the printing work and transmitting the edited image data to the LSU and performing the printing work for the edited image data as the Examiner states on page 4 of paper

number 6 that the combination of references teach or suggest.

Furthermore, nowhere in Yim in the cited section of col. 5, lines 47-col. 7, line 38 or anywhere else is there a teaching or suggestion of decreasing of the amount of light emitted from the LSU at a predetermined rate. The Examiner cites the laser beam of Anzai of suggesting a laser scanning unit, however, there is no teaching or suggestion of decreasing of *transmitting the image data to the laser scanning unit if the detected paper is a thick; and decreasing the amount of the light emitted from the laser scanning unit at a predetermined rate and performing the printing work*. Yim mentions the level of the transfer voltage being converted and sent to a controller for controlling the operation of the system, but still there is no specific teaching or suggestion of decreasing the amount of light emitted from the LSU. The manipulation the laser beam is mentioned by Anzai but not of decreasing the amount of light emitted at a predetermined rate. It is the teaching that render the claimed subject matter obvious that is important rather than whether the features of one reference may be bodily incorporated into another reference.

Anzai actually teaches away from the present invention in that Anzai teaches the *arbitrary* change of the recording density in the scanning and sub-scanning direction for recording image with an arbitrary dimension without information on the original image as mentioned in the abstract of Anzai while the present invention is decreasing the amount of light emitted at a predetermined rate and not an arbitrary change. According to MPEP §2145, "It is improper to combine references where the references teach away from their combination. *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983). This portion of Anzai cannot be just ignored because according to MPEP §2141.02, "A prior art reference must be

considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).”

With regard to claim 5, the Examiner states that Yim discloses a process for controlling a transfer voltage in an image forming apparatus (col 1, lines 14-18), the process comprising the steps of: detecting the kind of paper selected by a user (col 5, lines 22-41); increasing a developing voltage applied to the developing machine to a predetermined voltage level (col 5, line 47 - col 7, line 38); and transmitting the edited image data to the LSU and performing the printing work for the edited image data (col 7, lines 38-49).

First, claim 5 is claiming *transmitting the image data to the laser scanning unit if the detected paper is a thick; and increasing a developing voltage applied to the developing machine to a predetermined voltage level and then performing the printing work* and not increasing a developing voltage applied to the developing machine to a predetermined voltage level; and transmitting the *edited image data* to the LSU and performing the printing work for the edited image data as the Examiner states.

Furthermore, Yim teaches of adjusting the transfer voltage according to sensed thickness and the printing environment but fails to teach or suggest of increasing the developing voltage to a predetermined voltage when the paper is detected as being thick. Further, Anzai or the combination fail to teach or suggest the transmitting of the image data to the LSU when the paper is thick. Simply having a laser beam in Anzai and a general thickness constraint in Yim does

not teach or suggest the image data being transmitted to the LSU when the paper is thick. There is no nexus in the two references that teaches the image data being transmitted in such a circumstance and then increasing the developing voltage as we look to see whether combined teachings render the claimed subject matter obvious.

With regard to claim 6, the Examiner stated that Yim also discloses wherein the predetermined voltage level is equal to or less than -250 V (col 5, line 47 - col 7, line 38).

However, looking through all of Yim, no such range of predetermined voltage level is given, in fact no specific voltage level is ever given in Yim. Therefore, the combination of references fail to teach or suggest all of the claimed limitations.

Respectfully, the Examiner also fails to show a proper motivation to modify Yim with Anzai. "Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability. *In re Dembiczak*, 175 F.3d 994, 50 USPQ.2d 1614 (Fed. Cir. 1999). The showing must be "clear and particular" without broad generalized conclusory statements. *Id.* There must be specific statements showing the scope of the suggestion, teaching, or motivation to combine the prior art references. *Id.* at 1000. There must be an explanation to what specific understanding or technical principle would have suggested the combination of references. *Id.* Respectfully, the motivation given by the examiner of "totally depict the image forming apparatus" as taught in col. 1, lines 23-47 is a broad generalized conclusory statement that does

not properly show the motivation to combine or modify the references.

In view of the foregoing amendments and remarks, all claims are deemed to be allowable and this application is believed to be in condition to be passed to issue. If there are any questions, the examiner is asked to contact the applicant's attorney.

A fee of \$344.00 is incurred by this Amendment for the addition of four (4) independent claims above three (3). Applicant's check drawn to the order of Commissioner accompanies this Amendment. Should there be a deficiency in payment, or should other fees be incurred, the Commissioner is authorized to charge Deposit Account No. 02-4943 of Applicant's undersigned attorney in the amount of such fees.

Respectfully submitted,



Robert E. Bushnell,
Attorney for the Applicant
Registration No. 27,774

1522 "K" Street, N.W., Suite 300
Washington, D.C. 20005
(202) 408-9040

Folio: P56147
Date: 11/10/03
I.D.: REB/SS

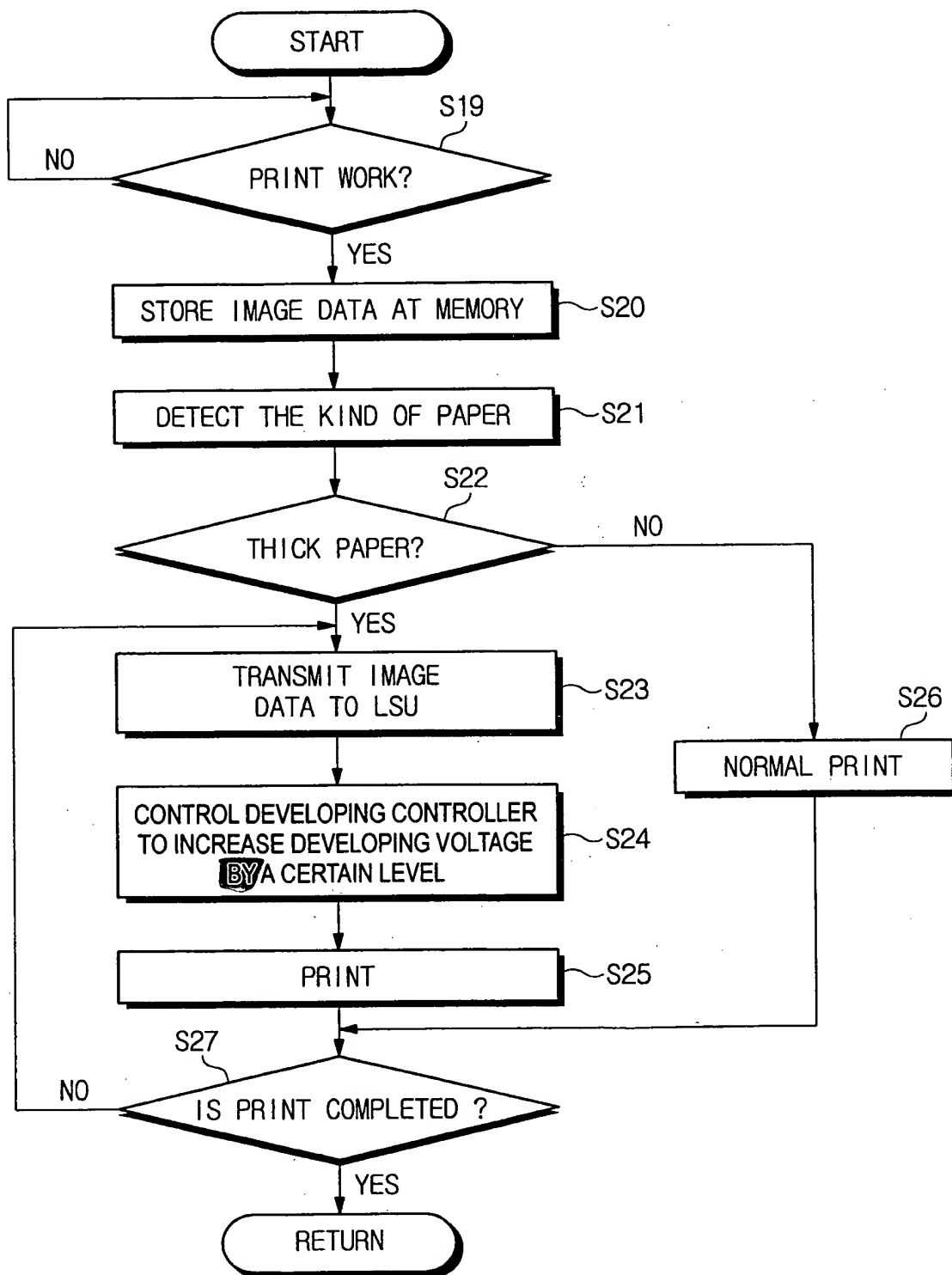


Fig. 5